
In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (withdrawn) The process of claim 24 wherein said steps of at least partially inserting said polymeric tube and post-processing comprise:
 - (a) inserting a length of said polymeric tube having a polymeric tube external diameter at least partially into a length of said metallic tube having a metallic tube internal and external diameter, said metallic tube internal diameter being larger than said polymeric tube external diameter; and
 - (b) reducing an external and internal diameter of said metallic tube until said internal diameter of said metallic tube is essentially equal to said external diameter of said polymeric tube.
2. (withdrawn) The process of claim 1 wherein said step of reducing is through the application of an inwardly compressive circumferential force about said metallic tube.
3. (withdrawn) The process of claim 1 which further comprises the step of extruding said polymeric tube prior to the step of inserting.
4. (withdrawn) The process of claim 3 which further comprises the step of cutting said polymeric tube to said length after said step of extruding.
5. (withdrawn) The process of claim 4 wherein said step of extruding comprises a step of coextruding.
6. (withdrawn) The process of claim 1 wherein said step of inserting comprises fully inserting said length of said polymeric tube into said length of said metallic tube.
7. (previously presented) The process of claim 22 wherein said steps of at least partially inserting said polymeric tube and post-processing further comprise:
 - (a) reducing an outer diameter of said at least a partially crosslinked polymeric tube from a first outer diameter to a smaller second outer diameter;
 - (b) inserting a length of said at least a partially crosslinked polymeric tube at least partially into a length of said metallic tube having a metallic tube internal and external diameter, said metallic tube internal

diameter being larger than said polymeric tube second outer diameter and approximately equal to said first outer diameter of said at least partially crosslinked polymeric tube; and

- (c) heating said tubes so that said partially crosslinked polymeric tube expands in diameter to approximate said first outer diameter.
- 8. (original) The process of claim 7 wherein said at least partially crosslinked polymeric tube is at least 50% crosslinked.
- 9. (original) The process of claim 8 wherein said at least partially crosslinked polymeric tube is at least 60% crosslinked.
- 10. (original) The process of claim 9 wherein said at least partially crosslinked polymeric tube is polyethylene.
- 11. (original) The process of claim 10 wherein said polyethylene is fully crosslinked.
- 12. (original) The process of claim 7 which further comprises the step of extruding said polymeric tube prior to the step of reducing.
- 13. (original) The process of claim 12 which further comprises the step of cutting said polymeric tube to said length after said step of extruding.
- 14. (original) The process of claim 12 wherein said step of extruding comprises a step of coextruding.
- 15. (original) The process of claim 7 wherein said step of inserting comprises fully inserting said length of said polymeric tube into said length of said metallic tube.
- 16. (previously presented) The process of claim 24 wherein said steps of at least partially inserting said polymeric tube and post-processing further comprise:
 - (a) inserting a length of said polymeric tube having a polymeric tube external diameter at least partially into a length of said metallic tube having a metallic tube internal and external diameter, said metallic tube internal diameter being larger than said polymeric tube external diameter; and
 - (b) sealing one end of said polymeric tube;
 - (c) heating said tubes to a temperature at which the polymeric tube becomes processable; and
 - (d) pressurizing said polymeric tube with a sufficient degree of pressure to effect radial expansion of said polymeric tube.

17. (original) The process of claim 16 which further comprises the step of extruding said polymeric tube prior to the step of inserting.
18. (original) The process of claim 17 which further comprises the step of cutting said polymeric tube to said length after said step of extruding.
19. (previously presented) The process of claim 17 wherein said step of extruding comprises a step of coextruding.
20. (original) The process of claim 16 wherein said step of inserting comprises fully inserting said length of said polymeric tube into said length of said metallic tube.
21. (currently amended) A process for joining at least two tubes without sagging of either of said tubes, each tube comprising an inner polymeric tube within an outer metallic tube comprising the steps of:
 - (a) at least partially inserting one end of a connecting means said end having at least one raised circumferential rib, into one end of at least one of said tubes with contacting engagement with a portion of an interior surface of said polymeric tube; and
 - (b) inserting a first sealing means about a portion of an exterior surface of said outer metallic tube which is radially above at least a portion of said at least partially inserted end of said connecting means for joining the connecting means to said inner polymeric tube in a leak-proof manner by inward circumferential pressure;
 - (c) at least partially inserting at least one other end of said connecting means having at least one raised circumferential rib on said at least one other end, into one end of at least one different tube with contacting engagement with a portion of an interior surface of said at least one different polymeric tube; and
 - (d) inserting a second sealing means about a portion of an exterior surface of said outer metallic surface of said at least one different tube which is radially above at least a portion of said at least partially inserted one other end of said connecting means for joining the connecting means to said different inner polymeric tube in a leak-proof manner by inward circumferential pressure.
22. (previously presented) The process of claim 21 wherein said polymeric tube is at least a partially crosslinked polymeric tube.

23. (previously presented) The process of claim 21 which further comprises the step of

at least partially inserting at least one of said inner polymeric tubes into said metallic tube to form a metallic-encased polymeric tube.

24. (previously presented) The process of claim 23 which further comprises the step of

post-processing said tube to effect contacting engagement between at least a portion of an interior surface of said metallic tube and at least a portion of an exterior surface of said polymeric tube.

25. (currently amended) A process for joining at least two tubes without sagging of either of said tubes, each tube comprising an inner polymeric tube within an outer metallic tube comprising the steps of:

- (a) at least partially inserting one end of a connecting means into one end of at least one of said tubes with contacting engagement with a portion of an interior surface of said polymeric tube; and
- (b) sealingly engaging said connecting means with said inner polymeric tube by inward circumferential pressure on said outer metallic tube where said outer metallic tube is radially above at least a portion of said inner polymeric tube and said one end of said connecting means;
- (c) at least partially inserting at least one other end of said connecting means into one end of at least one different tube with contacting engagement of said other end of said connecting means with a portion of an interior polymeric surface of said at least one different tube; and
- (d) sealingly engaging said at least one other end of said connecting means with said at least one different tube by inward circumferential pressure on said outer metallic tube of said at least one different tube where said outer metallic tube of said at least one different tube is radially above at least a portion of said inner polymeric tube and said at least one other end of said connecting means.

26. (previously presented) The process of claim 25 wherein said polymeric tube is at least a partially crosslinked polymeric tube.

27. (previously presented) The process of claim 25 which further comprises the step of

at least partially inserting at least one of said polymeric tubes into said metallic tube to form a metallic-encased polymeric tube.

28. (previously presented) The process of claim 27 which further comprises the step of

post-processing said tube to effect contacting engagement between at least a portion of an interior surface of said metallic tube and at least a portion of an exterior surface of said polymeric tube.

29. (previously presented) The process of claim 28 wherein said steps of at least partially inserting said polymeric tube and post-processing comprise:
- (a) inserting a length of said polymeric tube having a polymeric tube external diameter at least partially into a length of said metallic tube having a metallic tube internal and external diameter, said metallic tube internal diameter being larger than said polymeric tube external diameter; and
 - (b) reducing an external and internal diameter of said metallic tube until said internal diameter of said metallic tube is essentially equal to said external diameter of said polymeric tube.
30. (previously presented) The process of claim 29 wherein said step of reducing is through the application of an inwardly compressive circumferential force about said metallic tube.
31. (previously presented) The process of claim 29 which further comprises the step of extruding said polymeric tube prior to the step of inserting.
32. (previously presented) The process of claim 31 which further comprises the step of cutting said polymeric tube to said length after said step of extruding.
33. (previously presented) The process of claim 32 wherein said step of extruding comprises a step of coextruding.
34. (previously presented) The process of claim 29 wherein said step of inserting comprises fully inserting said length of said polymeric tube into said length of said metallic tube.
35. (previously presented) The process of claim 26 wherein said steps of at least partially inserting said polymeric tube and post-processing further comprise:
- (a) reducing an outer diameter of said at least a partially crosslinked polymeric tube from a first outer diameter to a smaller second outer diameter;
 - (b) inserting a length of said at least a partially crosslinked polymeric tube at least partially into a length of said metallic tube having a metallic tube internal and external diameter, said metallic tube internal diameter being larger than said polymeric tube second outer diameter and approximately equal to said first outer diameter of said at least partially crosslinked polymeric tube; and

- (c) heating said tubes so that said partially crosslinked polymeric tube expands in diameter to approximate said first outer diameter.
- 36. (previously presented) The process of claim 35 wherein said at least partially crosslinked polymeric tube is at least 50% crosslinked.
- 37. (previously presented) The process of claim 36 wherein said at least partially crosslinked polymeric tube is at least 60% crosslinked.
- 38. (previously presented) The process of claim 37 wherein said at least partially crosslinked polymeric tube is polyethylene.
- 39. (previously presented) The process of claim 38 wherein said polyethylene is fully crosslinked.
- 40. (previously presented) The process of claim 35 which further comprises the step of extruding said polymeric tube prior to the step of reducing.
- 41. (previously presented) The process of claim 40 which further comprises the step of cutting said polymeric tube to said length after said step of extruding.
- 42. (previously presented) The process of claim 41 wherein said step of extruding comprises a step of coextruding.
- 43. (previously presented) The process of claim 35 wherein said step of inserting comprises fully inserting said length of said polymeric tube into said length of said metallic tube.
- 44. (previously presented) The process of claim 29 wherein said steps of at least partially inserting said polymeric tube and post-processing further comprise:
 - (a) inserting a length of said polymeric tube having a polymeric tube external diameter at least partially into a length of said metallic tube having a metallic tube internal and external diameter, said metallic tube internal diameter being larger than said polymeric tube external diameter; and
 - (b) sealing one end of said polymeric tube;
 - (c) heating said tubes to a temperature at which the polymeric tube becomes processable; and
 - (d) pressurizing said polymeric tube with a sufficient degree of pressure to effect radial expansion of said polymeric tube.

45. (previously presented) The process of claim 44 which further comprises the step of extruding said polymeric tube prior to the step of inserting.
46. (previously presented) The process of claim 45 which further comprises the step of cutting said polymeric tube to said length after said step of extruding.
47. (previously presented) The process of claim 45 wherein said step of extruding comprises a step of coextruding.
48. (previously presented) The process of claim 44 wherein said step of inserting comprises fully inserting said length of said polymeric tube into said length of said metallic tube.
49. (new) The process of claim 21 which further comprises the step of adding a colorant to at least a portion of said inner polymeric tube.
50. (new) The process of claim 49 wherein said colorant is visible when exposed to visible illumination.
51. (new) The process of claim 49 wherein said colorant is invisible when exposed to visible illumination, but visible under exposure to non-visible spectrum illumination.
52. (new) The process of claim 25 which further comprises the step of adding a colorant to at least a portion of said inner polymeric tube.
53. (new) The process of claim 52 wherein said colorant is visible when exposed to visible illumination.
54. (new) The process of claim 52 wherein said colorant is invisible when exposed to visible illumination, but visible under exposure to non-visible spectrum illumination.